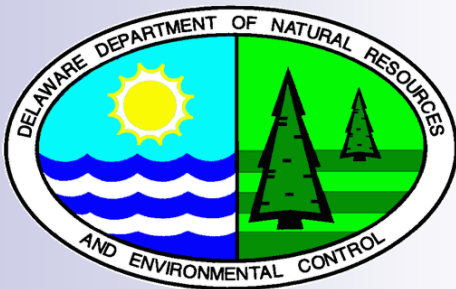


# **Public Workshop** ***On Planned Amendments to Regulation No. 1144***



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***Blue Skies Delaware; Clean Air for Life***

# ***Purpose of This Workshop***

- To briefly review current requirements for stationary generators in Delaware.
- To educate the public and affected industry on the planned amendments to the stationary generator regulation.
- To hear comments and recommendations to aid in the development of the formal proposed amendments to the regulation.



# ***Outline***

- History of Regulation No. 1144
- Overview of Current Requirements
- Discussion of Planned Amendments
- Questions & Answers



# ***History of Regulation No. 1144***

- Delaware's Emissions Inventory identified generators as large “ton per day” sources, and at the same time small “ton per year” sources.
- Typically operate when the health threat from ozone is at its worst (hot, sunny days...which coincide with high energy demands).
- Diesel generators emit air contaminants at much higher rates per megawatt-hour of power than larger units (*up to 30 times more NO<sub>x</sub> than DE coal fired power plants*).



# ***History of Regulation No. 1144***

- Regulation Development Workgroup was formed in Fall 2003 to develop an initial draft of a regulation, which consisted of representatives from the organizations below.

<b>American Lung Association of Delaware</b>	<b>Delaware Electric Cooperative</b>	<b>Delaware Public Service Commission</b>
<b>Conectiv</b>	<b>Delaware Farm Bureau</b>	<b>Delmarva Poultry Industry</b>
<b>Delaware Dept. of Corrections</b>	<b>Delaware Healthcare Association</b>	<b>MBNA America</b>
<b>Delaware Energy Office</b>	<b>Delaware Nature Society</b>	<b>University of Delaware Center for Energy and Environmental Policy</b>



# ***History of Regulation No. 1144***

- Goals of the workgroup included:
  - to clarify what constitutes an “emergency”,
  - provide for emergency-only generators to operate as needed during conditions of emergency,
  - require use of “clean” generators for non-emergency power generation.
- Workgroup met 7 times over a 14 month period (11/03-12/04).
- Regulation No. 1144, “Control of Stationary Generator Emissions” became effective on **January 11, 2006.**



# ***Current Requirements of Regulation No. 1144***

- Initial Notification
- Emissions Standards
- Fuel Sulfur Standards
- Operating Requirements
- Recordkeeping & Reporting



# ***Planned Amendments – Definitions***

- Two new definitions:
  - “Demand Response”
  - “Demand Response Provider”
- Minor edits to two definitions:
  - “Biodiesel”
  - “Owner”





# ***Planned Amendments – Definitions***

- Removing language from two definitions:
  - “Emergency Generator”
  - “Stationary”
- Generally clearer to not incorporate any provisions into a definition which are a requirement or restriction.
- Language moved from the definition of “Stationary” to the Applicability section.



# ***Planned Amendments – Emissions Standards***

- Regulation currently references Nonroad standards for all new, emergency generators.
- Nonroad standards include Tier 4 standards, which require aftermarket controls to be installed by manufacturers.
- Aftermarket controls are not suitable for emergency engines, due to inadequate run-time and efficiency.



# ***Planned Amendments – Emissions Standards***

- EPA acknowledges this issue within New Source Performance Standards (NSPS) for stationary engines.
  - Only requires Nonroad's Tier 2 or 3 standards for new, emergency engines.
  - Requires Tier 4 standards for new, non-emergency engines.
- Planned amendments will reference NSPS standards (Tier 2/3) for new, emergency generators.



# ***Planned Amendments – Emissions Standards***

- Tables within 3.2.2.1 and 3.2.2.2  
(*standards for new, distributed generators*)
  - Inadvertent change in the “effective date” within heading of tables.
  - Reformatting of all Air Quality regulations in 2008 changed applicable date in header to January 1, 2008.
  - Amendment will correct dates to original effective date of January 11, 2006.



# ***Planned Amendments – Emissions Standards***

## ■ Table within 3.2.2.1

- PM standard for new, distributed generators installed on or after 1/1/2012 to be amended.
- Current PM standard is less stringent than equivalent federal requirement.
- PM standard being lowered to equal federal standard for non-emergency diesel engines.



# ***Planned Amendments – Fuel Sulfur Standards***

- Fuel sulfur content in diesel fuels being lowered to 15ppm, (down from current 500ppm requirement).
  - Only applies to future shipments of diesel fuel which are received, unless generator is subject to NSPS requirements for diesel engines.
  - Most likely already receiving 15ppm S diesel.



# ***Planned Amendments – Fuel Sulfur Standards***

- Numerical sulfur content standards for natural gas and propane are being removed.
  - Hard for end user to show compliance.
  - End user has no say in sulfur content of these fuels.
- Natural gas and propane will instead be required to meet EPA or industry standards.
- All other gaseous fuels will still be subject to the 170ppmv total sulfur requirements.



# ***Planned Amendments – Recordkeeping & Reporting***

- New reporting requirement for “demand response providers” (DRP).
  - Participation in demand response by generators can affect Delaware’s air quality.
  - Imperative for the Department to understand when demand response events occur and details about generators’ participation.
  - These details are not readily available from persons, groups, or organizations which participate in, offer, or contract with demand response.





# ***Planned Amendments – Recordkeeping & Reporting***

- New reporting requirement for “demand response providers” (*continued*).
  - Detailed info on generator, owner, date of operation, reason for operation, capacity.
  - To be submitted by April 1 following a calendar year (i.e., 4/1/12 for 2011 data).
  - DRPs have resources & staff to record and prepare such reports, as opposed to generator owners.



# ***Planned Amendments – Miscellaneous***

- Clarify instances of “EPA” to mean “US EPA”.
- Incorporate testing procedures/methods referenced in NSPS stationary engines as applicable testing methods.
- Incorporate industry standard for propane as applicable method for testing its sulfur content.



# For More Information...

Visit the Regulation No. 1144 Website at:

[http://www.awm.delaware.gov/Info/Regs/  
Pages/AQMReg1144.aspx](http://www.awm.delaware.gov/Info/Regs/Pages/AQMReg1144.aspx)

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